## **CLAIMS**

1. A process for preparing GMP from bovine whey, comprising:

processing bovine whey to remove fat, whey protein and aggregated proteins to produce a deproteinized whey;

concentrating the DPW;

acidifying the DPW;

at acid pH, contacting the DPW with an ion exchange resin to remove non-GMP peptides and proteins to obtain a resin effluent;

neutralizing the resin effluent;

subjecting the resin effluent to microfiltration to remove aggregated protein and fat;

subjecting the resin effluent to diafiltration to remove lactose, small peptides and minerals to provide a purified resin effluent;

concentrating and drying the resin effluent.

2. A process for preparing GMP from bovine whey, comprising:

processing bovine whey to remove fat, whey protein and aggregated proteins to produce a deproteinized whey;

concentrating the DPW;

subjecting the resin effluent to microfiltration to remove aggregated protein and fat;

acidifying the microfiltration permeate;

at acid pH, contacting the microfiltration permeate with an ion exchange resin to remove non-GMP peptides and proteins to obtain a resin effluent;

neutralizing the resin effluent;

subjecting the resin effluent to diafiltration to remove lactose, small peptides and minerals to provide a purified resin effluent; and

concentrating and drying the resin effluent.

- 3. GMP from bovine deproteinized whey having an SDS Gel Purity of at least 91%.
  - 4. GMP according to claim 3 having an SDS Gel Purity of at least 95%.
- 5. GMP from bovine deproteinized whey produced by the process of either claim 1 or 2.
  - 6. GMP according to claim 5 having an SDS Gel Purity of at least 91%.